

*Please provide the following information, and submit to the NOAA DM Plan Repository.*

**Reference to Master DM Plan (if applicable)**

*As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.*

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

**1. General Description of Data to be Managed****1.1. Name of the Data, data collection Project, or data-producing Program:**

Acoustic Multi-Beam Echosounder Data (ME70)

**1.2. Summary description of the data:**

The Southeast Fisheries Science Center Mississippi Laboratories collects data using a Simrad ME70 scientific multibeam acoustic echosounder during resource assessment and monitoring surveys in the Gulf of Mexico and U.S. Caribbean Sea. The multibeam echosounder measures acoustic backscattering as a function of depth. Measurements of scattering in the water column are used to estimate distribution, size, and abundance of marine organisms. Measurements of scattering from the seafloor are used to create maps of bathymetry and interpreted to characterize seafloor habitat.

Data collection with this system began during reef fish surveys in 2012 and occurs during all reef fish surveys conducted, in the Gulf of Mexico and Caribbean Sea, on FSV PISCES where the ME70 system is installed. Raw data are stored in Simrad.raw format files. The primary applications of these data at SEFSC are for high resolution mapping and characterization of reef fish habitat. Data are typically collected along parallel transects with spacing calculated to provide some overlap of the multibeam swath in adjacent transects to provide 100% coverage of the area sampled. The areas chosen for sampling with the ME70 are typically areas for which high resolution maps are not currently available from other sources. Maps of reef fish habitat generated from these data are used to expand the universe of sites that are sampled during reef fish surveys.

**1.3. Is this a one-time data collection, or an ongoing series of measurements?**

Ongoing series of measurements

**1.4. Actual or planned temporal coverage of the data:**

2012 to Present

**1.5. Actual or planned geographic coverage of the data:**

W: -98, E: -60, N: 31, S: 16

Gulf of Mexico and U.S. Caribbean Sea

**1.6. Type(s) of data:**

*(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)*  
Table (digital)

**1.7. Data collection method(s):**

*(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)*

Instrument: Kongsberg ME70 Multibeam Echosounder

Platform: NOAA Ship PISCES

Physical Collection / Fishing Gear: Not Applicable

**1.8. If data are from a NOAA Observing System of Record, indicate name of system:**

**1.8.1. If data are from another observing system, please specify:**

**2. Point of Contact for this Data Management Plan (author or maintainer)**

**2.1. Name:**

Charles H Thompson

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

Mississippi Laboratory

**2.4. E-mail address:**

charles.h.thompson@noaa.gov

**2.5. Phone number:**

228-688-2097

**3. Responsible Party for Data Management**

*Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.*

**3.1. Name:**

Charles H Thompson

**3.2. Title:**

Data Steward

**4. Resources**

*Programs must identify resources within their own budget for managing the data they produce.*

**4.1. Have resources for management of these data been identified?**

Yes

**4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):**

0

**5. Data Lineage and Quality**

*NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.*

**5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible**

*(describe or provide URL of description):*

Lineage Statement:

These data recorded by the multibeam echosounder are in .RAW format.

**5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:**

**5.2. Quality control procedures employed (describe or provide URL of description):**

Scientists collecting data with the ME70 echosounder review a checklist of items to ensure the echosounder and auxiliary sensors are operating correctly prior to data acquisition. The vessel and sensor geometry is documented. The echosounder display is monitored during data collection.

**6. Data Documentation**

*The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.*

**6.1. Does metadata comply with EDMC Data Documentation directive?**

Yes

**6.1.1. If metadata are non-existent or non-compliant, please explain:**

**6.2. Name of organization or facility providing metadata hosting:**

NMFS Office of Science and Technology

**6.2.1. If service is needed for metadata hosting, please indicate:**

**6.3. URL of metadata folder or data catalog, if known:**

<https://inport.nmfs.noaa.gov/inport/item/29505>

**6.4. Process for producing and maintaining metadata**

*(describe or provide URL of description):*

Metadata produced and maintained in accordance with the NMFS Data Documentation

Procedural Directive: <http://www.nmfs.noaa.gov/op/pds/documents/04/111/04-111-01.pdf>

## 7. Data Access

*NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.*

### 7.1. Do these data comply with the Data Access directive?

No

#### 7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

No

#### 7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

Constraints placed on data access will be enforced by the NCEI website. Please contact NCEI's water column sonar data staff ([wcd.info@noaa.gov](mailto:wcd.info@noaa.gov)) for additional information.

### 7.2. Name of organization of facility providing data access:

Mississippi Laboratory

#### 7.2.1. If data hosting service is needed, please indicate:

#### 7.2.2. URL of data access service, if known:

<https://www.ngdc.noaa.gov/mgg/wcd/>

### 7.3. Data access methods or services offered:

Interface to Water Column Sonar Data archive provides an online viewer that allows the user to select data files filtered by vessel, cruise, date, geographic area, etc. Small sets of data files can be downloaded immediately; larger sets of data files can be requested to be available for FTP download or distribution on magnetic media such as hard disk drives. Data can be accessed through an interactive map at: <https://www.ngdc.noaa.gov/mgg/wcd/>

### 7.4. Approximate delay between data collection and dissemination:

365 days

#### 7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

Access is delayed by the time required for review for quality assurance, packaging for transmittal to NCEI, and integration into the Water Column Sonar Data archive.

## 8. Data Preservation and Protection

*The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.*

### 8.1. Actual or planned long-term data archive location:

*(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)*

NCEI-CO

#### 8.1.1. If World Data Center or Other, specify:

#### 8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

### 8.2. Data storage facility prior to being sent to an archive facility (if any):

Mississippi Laboratory - Pascagoula, MS

### 8.3. Approximate delay between data collection and submission to an archive facility:

365 days

### 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

*Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection*

Data resides on Networked Attached Storage (NAS) environment. Security patches/updates are immediately applied to the host environment. Data is stripped/mirrored using RAID 50 technology to protect data from disk failure. Nightly backups are preformed and files are written to magnetic tape.

## 9. Additional Line Office or Staff Office Questions

*Line and Staff Offices may extend this template by inserting additional questions in this section.*